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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/033,893	01/03/2002	Hiroe Maeda	Q67967	9644

7590 04/29/2003
SUGHRUE, MION, ZINN, MACPEAK & SEAS, PLLC
2100 Pennsylvania Avenue, N.W.
Washington, DC 20037

EXAMINER

PRITCHETT, JOSHUA L

ART UNIT PAPER NUMBER

2872

DATE MAILED: 04/29/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/033,893

Applicant(s)

MAEDA ET AL.

Examiner

Joshua L Pritchett

Art Unit

2872

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 31 March 2003.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-6 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-6 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 06 September 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1 and 4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shigemura (US 5,753,140) in view of Takuzo (JP 59-159109).

Shigemura teaches a polarizer comprising two protective films between which a polarizing element is held (col. 3 lines 13-14). Shigemura further teaches the moisture content of the polarizer been less than 3% (or 15% for claim 4) (col. 3 lines 36-37). Shigemura further teaches the polarizing element being made of polyvinyl alcohol (col. 4 lines 43-44). Shigemura lacks reference to the polarizer as a whole having less than 3% water by weight. Takuzo teaches a PVA polarizing film that has less than 5% water (abstract line 6). The combination of the Shigemura protective films and the polarizing film of Takuzo would have a water content of less than 3% by weight. It would have been obvious to a person of ordinary skill in the art at the time the invention was made to have the Shigemura PVA polarizing film have a water content as

taught by Takuzo for the purpose of achieving higher quality polarization because less water would interfere with the light entering the PVA polarizing film.

Claims 2-3 and 5-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shigemura in view of Takuzo as applied to claims 1 and 4 respectively above, and further in view of Tsunekatsu (JP 06-123077).

Regarding claims 2 and 5, Shigemura in combination with Takuzo teaches the invention as claimed except for the claimed range of permeability of the protective layers. Tsunekatsu teaches a range of permeability that includes the values claimed by the application (abstract line 11). Tsunekatsu teaches a permeability of greater than $7,000 \text{ g}/(\text{m}^2 \cdot \text{day})$, while the lower limit of the claimed range is $50,000 \text{ g}/(\text{m}^2 \cdot \text{day})$ (with the units converted from cm^2 to m^2). It would have been obvious to a person of ordinary skill in the art at the time the invention was made to have the permeability of the protective layer taught by Tsunekatsu in the polarizer taught by the combination of Shigemura and Takuzo for the purpose of waterproofing the polarizer to prevent water from entering the system. The combination of Shigemura and Takuzo, which teaches polarizers, with Tsunekatsu, which teaches a waterproofed cloth, is valid for the reason that it teaches that a polyester layer is capable of having the permeability limitations claimed by the applicant. Shigemura already teaches the use of a polyester layer as the protective layer in the invention, but does not discuss the permeability of the polyester layer. Tsunekatsu teaches that the polyester layer already incorporated in the Shigemura invention is capable of being adapted to include the claimed permeability limitations. Therefore, because the Tsunekatsu reference is

only used to teach a potential physical property of a polyester layer and not the addition of the layer itself the references can be properly combined.

Regarding claims 3 and 6, Shigemura teaches the use of a protective layer in a polarizer comprising polyester (col. 3 lines 15-16).

Response to Arguments

Applicant's arguments with respect to claims 1 and 4 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Joshua L Pritchett whose telephone number is 703-305-7917.

The examiner can normally be reached on Monday - Friday 7:00 - 3:30.

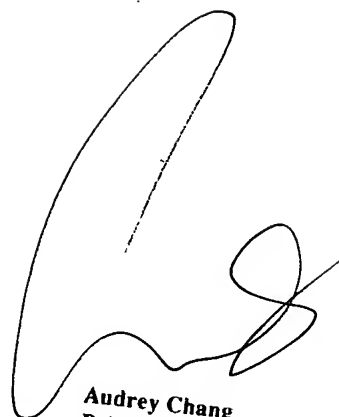
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Cassandra Spyrou can be reached on 703-308-1687. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9318 for regular communications and 703-872-9319 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0956.

Application/Control Number: 10/033,893
Art Unit: 2872

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JLP
April 24, 2003



Audrey Chang
Primary Examiner
Technology Center 2800